10/100 Base-T Ethernet Application
Impedance: 100 OHMS
Transmit open circuit inductance (OCL): 350uH (MIN) @100KHz 0.1VRMS with 8mA DC Bias
Rise Time: 2.5 nano-seconds from 10 to 90 percent
Industrial Temp: -40°C to +85°C
Contact Factory for Standard Temp.

**Electrical Specifications @25°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>OCL(uH min) @100KHz/0.1V with 8mA DC Bias</th>
<th>Turns Ratio chip: cable (±2%)</th>
<th>LED (L/R)</th>
<th>Insertion Loss (dB Max)</th>
<th>Return Loss (dB Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR1009-1326I</td>
<td>350</td>
<td>1CT:1CT</td>
<td>YES</td>
<td>G/Y</td>
<td>1.0 -18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18-20*LOG(F/30)</td>
</tr>
</tbody>
</table>

**Electrical Specifications @25°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Cross talk (dB Min)</th>
<th>CMR (dB Min)</th>
<th>Hi-POT (VDC)</th>
<th>Hi-POT Test 1.0mA/3Sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.5-1MHz 10 MHz 30 MHz 50 MHz 100 MHz</td>
<td>0.3-1MHz 10 MHz 30 MHz 60 MHz 100 MHz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All specifications subject to change without notice.

**MECHANICAL**

Unless otherwise specified all tolerances are: ± 0.25 in mm
**RoHS**

### Single Port RJ45 Connector

**AR1009-1326I**

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**SCHEMATICs:**

![Schematic Diagram]

**PCB Layout:**

![PCB Layout Diagram]

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**Notes:**

1. R1-R4=75 Ohms, 1/16W, 5% Resistors.
2. C1=1000pF, 2KV Decoupling Capacitor.
3. LED Compliant with IEC60825-1 Safety of Laser Products when operated up to 20mA.
4. LED Forward Voltage: 2.1V(TYP), LED Power Dissipation: 105mW. LED Peak Wavelength: Green=565nm, Yellow=585Nm

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**Materials and Finish:**

- Housing: Flammability Rating 94V-O.
- Shell: C2680 Brass, 025mm thick, 30+50u" nickel plating.
- Mod Jack Contact: Phospher Bronze, 0.35mm thick, Gold Plated.
- LED: Diffused Epoxy Lens, 0.5x0.5mm Carbon Steel wireframe leads.